CASIO
DIGITAL GUITAR
DG-1

Player's Manual—1

Manual del Guitarrista-11

CASIO

Thank You

And congratulations on your choice of the CASIO DG-1 Digital Guitar. Your digital guitar is an entirely new type of digital musical instrument, which features the latest in state-of-the-art digital technology.

Read the Manual

To obtain optimum performance and assure long-term reliability, be sure to read this manual carefully before playing your new DG-1 guitar.

- Contents of this manual are subject to change without notice.
- CASIO has done its best to include all pertinent information on the DG-1 in this manual. If you should find any errors or have questions on the contents, please contact your distributor.
- CASIO reserves exclusive rights to the contents of this manual.
- CASIO does not claim responsibility for damages or claims incurred as a result of the use of the DG-1 or this manual.

Important Precautions

■ Please be careful of extreme temperatures, moisture and direct sunlight.

Please avoid using or storing your DG-1 in places subject to direct sunlight, excessively damp places or near air conditioning and heating appliances where temperatures and moisture tend to be extreme. Also, do not leave this unit in an automobile with the windows closed during hot summer months.

■ Please do not drop this instrument or subject it to strong shocks.

Subjecting this precision instrument to strong shocks may cause malfunctions or damage the neck, so please use extreme care in handling.

■ Make sure no foreign matter gets inside of this unit.

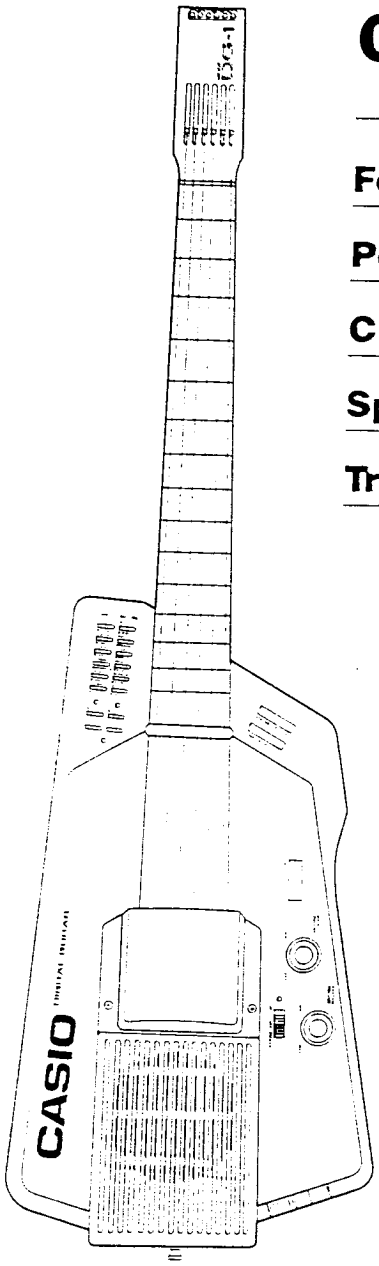
Please take care that no foreign objects, especially metal objects such as hair pins, sewing needles or coins get into the unit. Any metal objects or liquids entering the unit may cause malfunctioning as well as an electric shock hazard.

■ Customizing may cause malfunction and accidents.

The DG-1 uses many high-precision electronic components. Converting it in any manner or needlessly touching internal parts may cause malfunction and accidents and should therefore be avoided under all circumstances.

■ Do not use thinner or similar chemicals when cleaning this unit.

To clean the DG-1, wipe the exterior surface with a soft cloth dampened with a neutral detergent solution which has been wrung out completely. Never use paint thinner, benzene or other solvents.



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Overall View

① Power Switch

Used to turn power ON and OFF.

② Main Volume Control

Used to control volume of guitar sounds.

③ Rhythm Volume Control

Used to control volume of rhythm sounds.

④ Speaker

High performance 10cm (4 inch) built-in speaker.

⑤ Mute Key

Used to mute sound during performance.

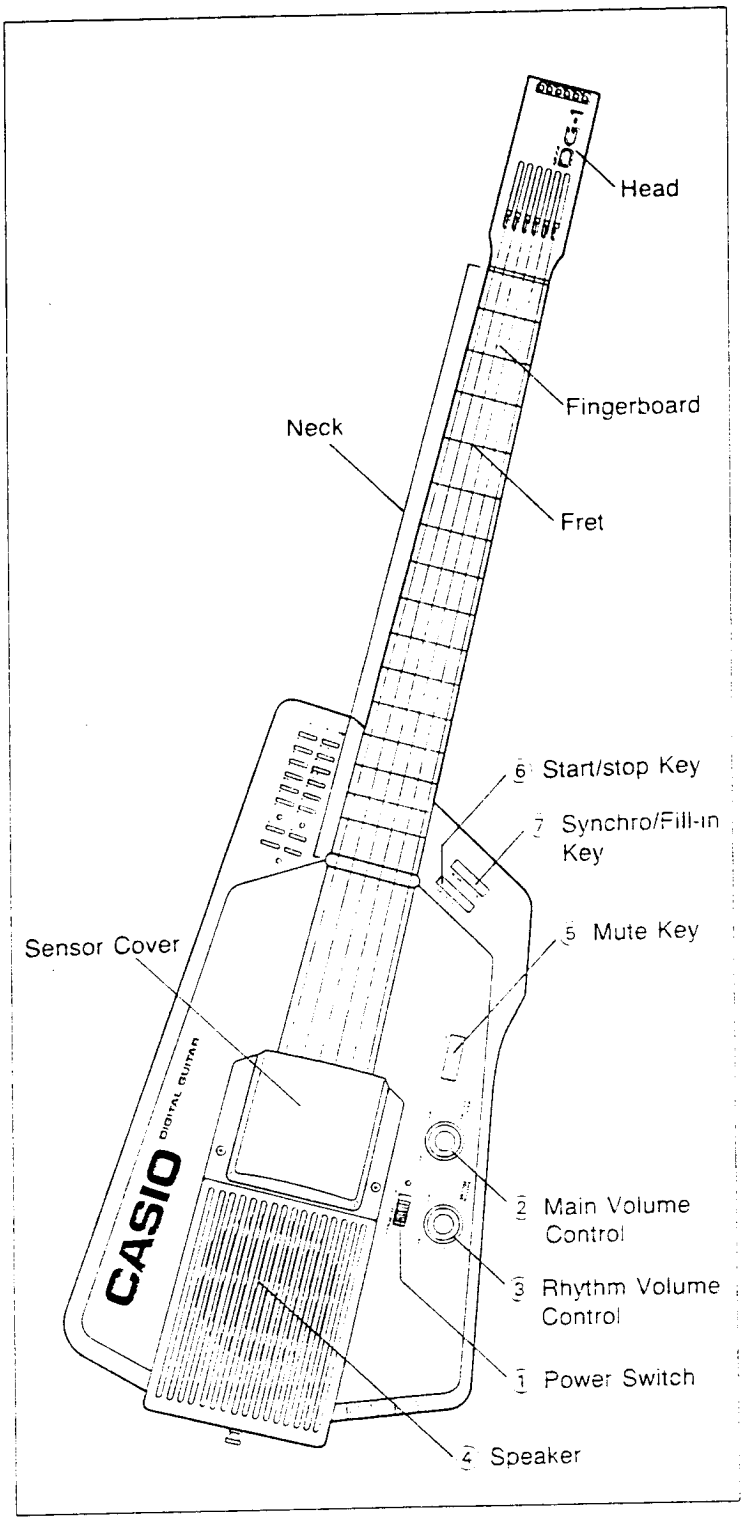
⑥ Start/Stop Key

Used to start and stop selected auto-rhythm.

⑦ Synchro/Fill-in Key

Used to select Synchro start or insert fill-ins in auto-rhythm performance. When pressed, Tempo Indicator (⑮) flashes selected tempo. When a string is played, the auto-rhythm begins automatically, in synchronization (from 1st beat). When pressed during auto-rhythm performance, an appropriate fill-in is inserted in the rhythm pattern.

- *Press the Synchro/fill-in once more to cancel the synchro start mode.*



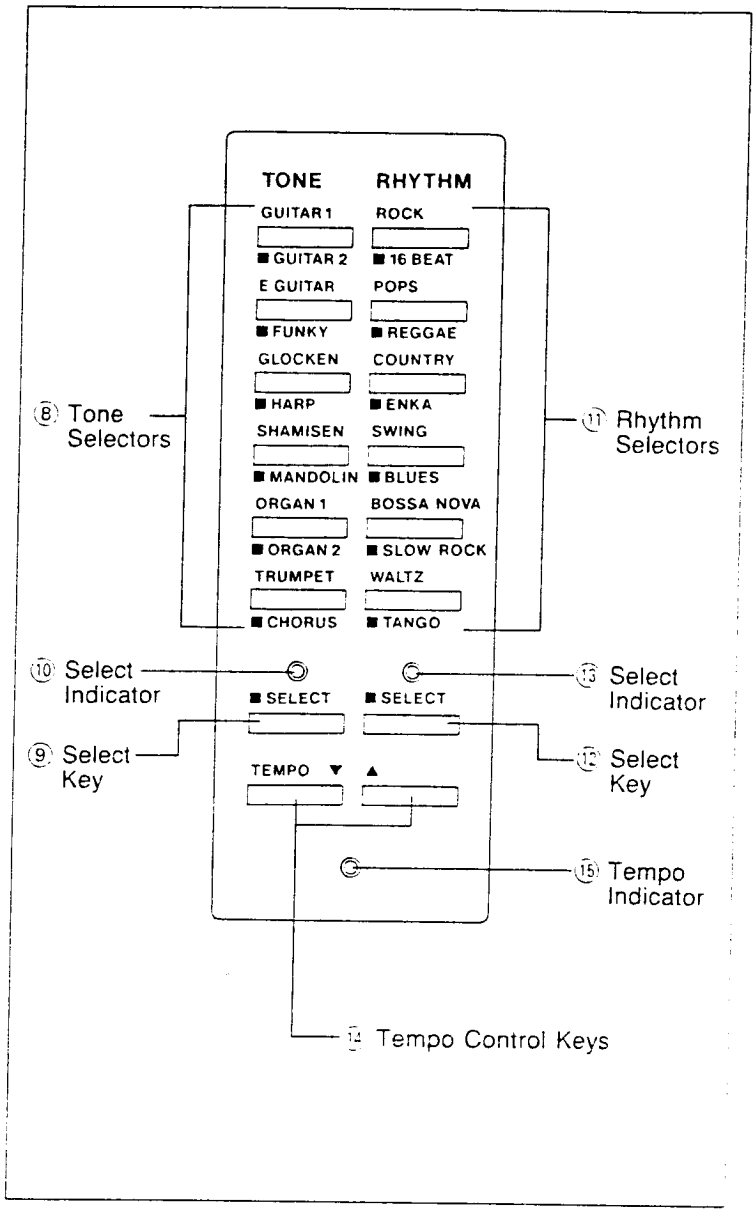
Panel Control Section

⑧ Tone Selectors, ⑨ Select Key, ⑩ Select Indicator

The tone selectors are used to specify desired guitar tones. Use the tone selectors to choose a tone. Each selector is marked with two names, one above the selector and one below. When the select indicator is OFF, tone marked above the selector is selected. When the select indicator is ON, tone marked below the selector is selected.

⑪ Rhythm Selectors, ⑫ Select Key, ⑬ Select Indicator

The rhythm selectors are used to specify desired rhythms. Use the rhythm selectors to choose a rhythm. Each selector is marked with two names, one above the selector and one below. When the select indicator is OFF, rhythm marked above the selector is selected. When the select indicator is ON, rhythm marked below the selector is selected.



⑭ Tempo Control Keys

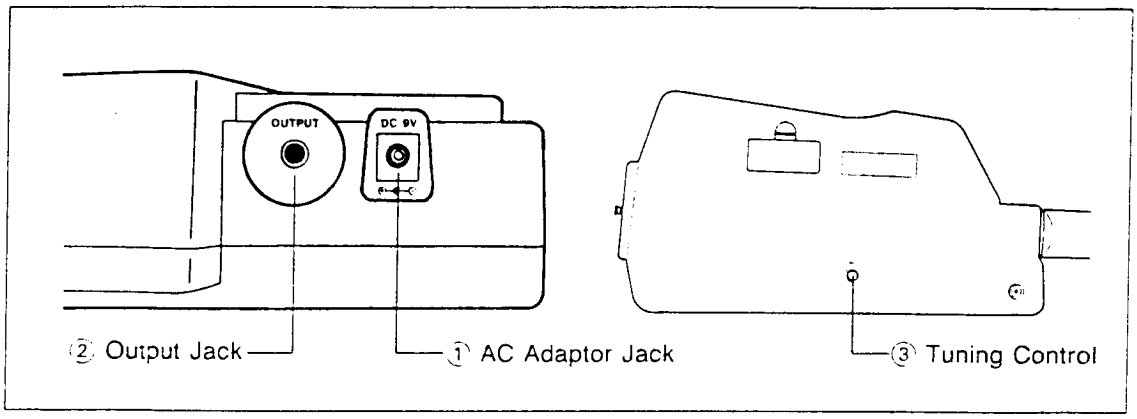
Used to adjust rhythm tempo. Press the < ▲ > key to speed up rhythm, or the < ▼ > key to slow rhythm down. Hold the key down to make major changes in tempo.

- *Press both keys simultaneously to initialize tempo (reset at factory setting ♩ = 120).*

⑮ Tempo Indicator

Indicates the tempo of auto-rhythm. Lights to indicate the first beat of each measure. Also lights when in stand-by status in Synchro start mode.

Connections



①AC Adaptor Jack

Input cord from AC adaptor (AD-5) when using home current or car adaptor (CA-5).

②Output Jack

Connect headphones for private listening (useful at night). Or connect to audio or musical instrument amplifiers.

③Tuning Control

Used to control tuning, raising or lowering tuning within a ±50 cents range. Useful in matching tuning with other instruments.

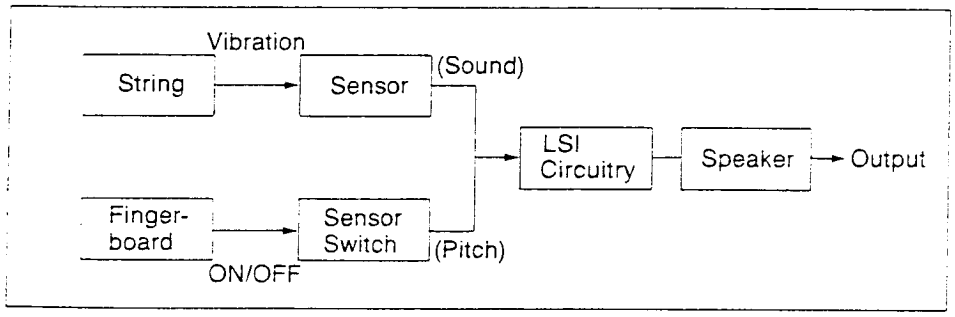
Making Music On the DG-1

1. When a string is played, the string's vibration is sensed by a built-in sensor and the selected tone is output through the built-in speaker.
2. The digital guitar features switches which are actually built-in to the fingerboard behind each fret. If your finger(s) is not properly centered over the strings you depress, neighboring strings may sound (even though you haven't depressed neighboring strings), as the switches may be activated.

• *No sound is output if strings are played too softly.*

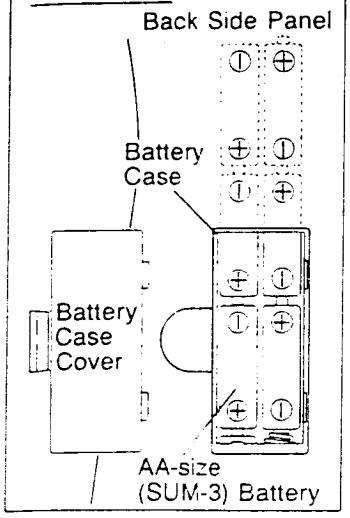
Note:

There are two different basic types of preset sounds built-in to the DG-1— sounds which decay, such as the guitar tone, and sounds which are sustained, such as the organ tone. Sustained sounds may be cut off by using the mute key, or by releasing the fretboard (which turns OFF the built-in sensor switch).



Batteries

Use Six AA-size (SUM-3) Batteries



Inserting and Replacing Batteries

Remove the battery compartment cover and insert batteries, taking care that polarity is correct. When replacing batteries, be sure to replace all six to ensure longer battery life.

- *Turn power OFF before replacing batteries.*

■ Battery life of high-performance R6P (SUM-3) dry cells is approximately 13 hours. Weakened batteries will result in lower volume, poor tonal quality and eventually misoperation of functions. If such symptoms occur, replace all six batteries with new ones as soon as possible.

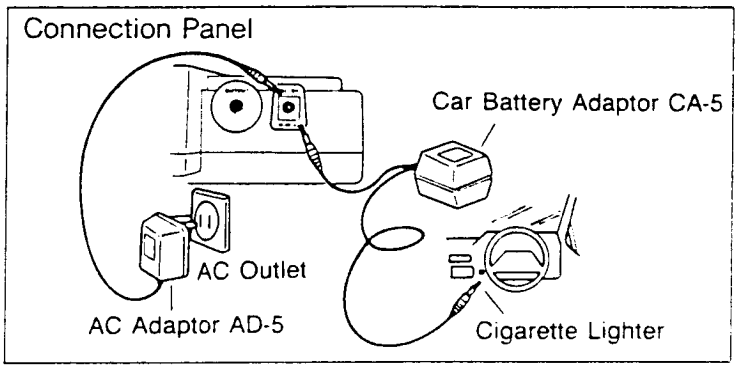
PRECAUTIONS

Incorrectly using batteries can cause leakage or bursts, and may damage your product. Note the following precautions:

1. Be sure that +/− polarity is correct.
2. Do not mix battery type.
3. Do not mix new batteries with old ones.
4. Never leave dead batteries in battery compartment as they may cause malfunctions.
5. Remove batteries when not using the product for extended period.
6. The supplied batteries are not rechargeable.
7. Do not expose the battery to direct heat, let it become shorted or try to take it apart.

(If a battery leaks, clean out the battery compartment of the product immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.)

Household AC Current



Connecting AC Adaptor

Connection of an AC adaptor (AD-5, optional) allows the unit to be powered by standard household current.

Use only an adaptor with the same voltage rating as your local power supply.

Car Cigarette Lighter

Connecting Car Adaptor

Connection of a car adaptor (CA-5, optional) allows the unit to be powered through a vehicle's cigarette lighter socket.

■ Always ensure that the power of the unit is OFF when connecting or disconnecting adaptors.

■ Only use specified CASIO AC or Car adaptors to prevent damage to the unit.

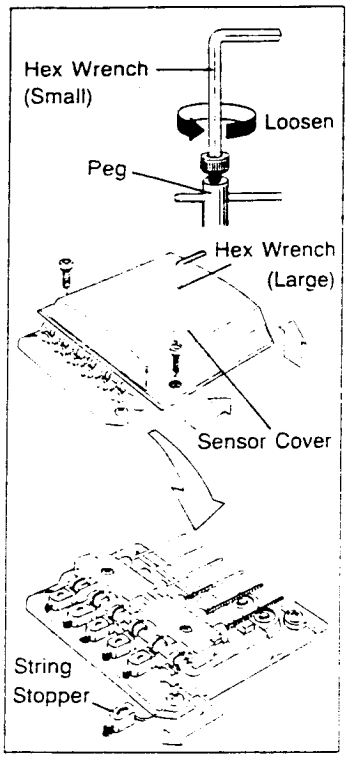
■ Adaptors normally become warm when connected to the power source. This is not cause for worry, but adaptors should be disconnected whenever the unit is not used for extended periods.

Auto Power Off Function

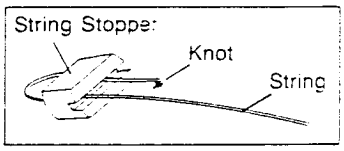
An automatic power cut-off function activates approximately 6 minutes after the last operation of the unit. Power supply can be restored by switching the power of the unit OFF and then ON again.

Changing Strings

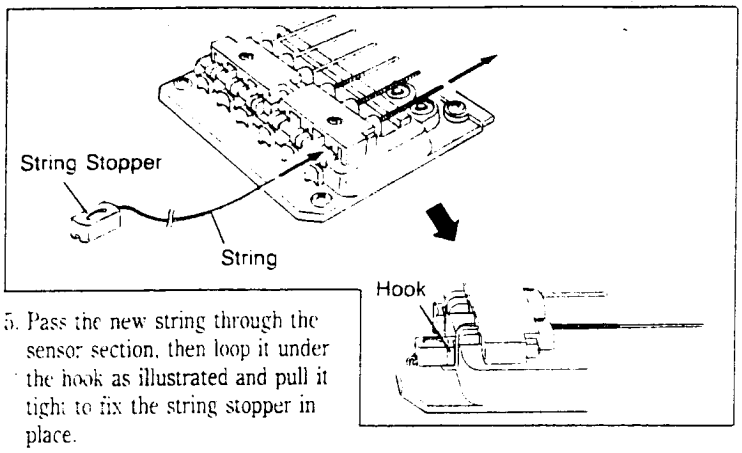
When changing strings, use the 2 accessory hex wrenches (large and small) supplied with this unit, according to the following procedures. These procedures should be repeated for each individual string.



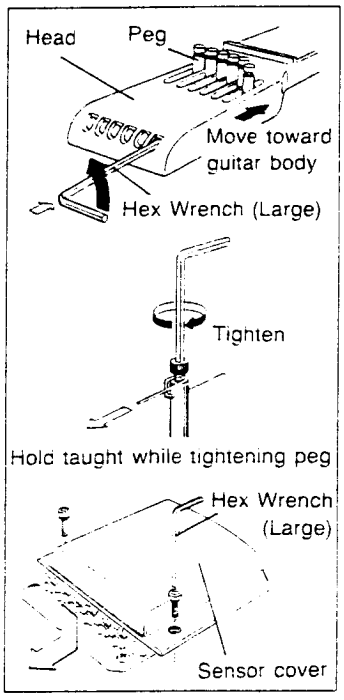
1. Use the small hex wrench to turn the head peg, loosening the string to be replaced.
2. Remove the sensor cover by loosening the two screws holding it in place, using the large hex wrench.
3. Free the string to be replaced by pressing the string stopper holding it to one side. Then pull the loose end of the string through the sensor section and finally remove it from the string stopper.



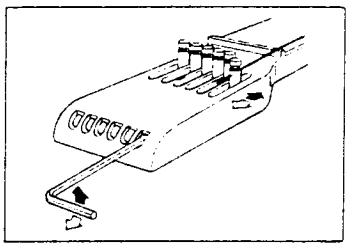
4. Tie a small knot at one end of the new string and feed it through the string stopper as illustrated.



5. Pass the new string through the sensor section, then loop it under the hook as illustrated and pull it tight to fix the string stopper in place.



6. Insert the large hex wrench at the end of the head and turn it counterclockwise to move the corresponding peg in the direction of the guitar body.
7. Pass the loose end of the string through the hole in the corresponding peg. While holding the string taught with one hand, tighten the peg with the small hex wrench.
8. Replace the sensor cover.



9. Insert the large hex wrench at the end of the head and turn it clockwise to move the peg towards the head end, applying tension on the string.

- Never use pliers or other tools to apply abnormal string tension, as doing so may warp or damage the neck. Also, avoid using excessive force on the neck.

Note:

- Use commercially available "gut" (nylon) guitar strings as replacement strings (gauge: 0.76 – 0.86 mm). Never use steel strings or strings with other gauges.
- If you misplace either of the accessory hex wrenches, you can buy replacement wrenches at your Casio dealer, or at your local hardware outlet. The large wrench is 3 mm, while the small wrench is 2.5 mm.
- Be sure to loosen string tension before storing your guitar for long periods.

Specifications

Model:	Casio Digital Guitar DG-1
Polyphonic:	6-note polyphonic
Preset Tones:	12 Tones; guitar 1 and 2, electric guitar, funky, glocken, harp, shamisen, mandolin, organ 1 and 2, trumpet, chorus
Auto-rhythms:	12 Rhythms (PCM source); rock, 16 beat, pops, reggae, country, enka, swing, blues, bossa nova, slow rock, waltz, tango
Rhythm Controls:	start/stop keys, synchro/fill-in key, tempo control keys, tempo indicator, rhythm volume control
Tuning Control:	A4 = 442 Hz ± 50 cents (± 1/4 tone)
Other Control:	mute key
Speaker:	10cm (4-inch) dia × 1 (2.0 W)
Terminals:	output jack (output impedance = 10kΩ, output voltage = 0.5 V (RMS) MAX), AC adaptor jack (DC 9 V)
Power Source:	3-way AC/DC power source; DC: 6 AA-size (SUM-3/R6P) dry cell batteries (Battery life approx. 3 hours) AC: AC adaptor (AD-5, optional) Car Battery: car adaptor (CA-5 optional)
Auto Power OFF:	Power turns OFF automatically approximately 6 minutes after last operation.
Power Consumption:	4 W
Dimensions:	882 (L) × 255 (W) × 77 (H) mm (34 3/4″ (L) × 10″ (W) × 3 1/16″ (H))
Weight:	2.8 Kg (6.2 lbs) including batteries
Standard Accessories:	6 AA-size dry cell batteries, 2 hex wrenches
Optional Accessories:	AC adaptor (AD-5), Car adaptor (CA-5), Custom soft case (SC-60G), Headphones (CP-2)

* *Design and specifications are subject to change without notice.*

Troubleshooting Guide

Symptom	Possible Cause	Remedy
No sound is output, even when strings are played.	■ Main volume control is at its minimum. ■ Headphones connected. ■ Auto power OFF function has turned power OFF.	■ Adjust main volume to desired level. ■ Disconnect headphones. ■ Turn power back ON (see page 6)
Rhythm does not sound.	■ Rhythm volume control is at its minimum.	■ Adjust rhythm volume to desired level.
Sound is occasionally distorted.	■ Interference caused by electrical appliances.	■ Use a power outlet away from appliances.
Occasional reception of television or radio waves.	■ High-output broadcasting station in neighborhood.	■ Try changing position of instrument. (Ex) If you're playing near a window, try moving away from window. *For further suggestions, contact your service center.*
No sound output when unit is connected to external amp.	■ Main volume control is at its minimum. ■ Short in connection cord.	■ Raise main volume level. ■ Replace connection cord.

Guidelines

Laid Down by FCC Rules for Use of the Unit in the U.S.A.

Not Applicable to Other Areas.

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate the computer with respect to the receiver
- move the computer away from the receiver
- plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems".
This booklet is available from the US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.